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MANUFACTURE OF SEMICONDUCTOR

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INVENTOR(s): OTANI HISASHI

MIYANAGA SHOJI

APPLICANT(s): SEMICONDUCTOR ENERGY LAB CO LTD [470730] (A Japanese

Company

or Corporation), JP (Japan)

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ABSTRACT

PURPOSE: To strictly control the introduced amount of a catalyst element in a method of obtaining crystalline silicon by heat treatment by using the catalytic element promoting crystallization.

CONSTITUTION: An extremely thin oxide film 13 is formed on an amorphous silicon film 12 formed on a glass substrate 11 and a water solution 14 of an acetate solution or the like having 10 to 200ppm (to be adjusted) of a catalytic element such as nickel. This state is held for a prescribed time and spin drying is performed by using a spinner 15. Then, heat treatment is performed at 550 deg.C for four hours so as to obtain a crystalline silicon

film. In this constitution, concentration of a catalytic element in a finished crystalline silicon film can be accurately controlled by adjusting the concentration of the catalytic element in the solution.